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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,356	03/16/2006	Thomas Stadlmayr	P29270	1141
7055 7590 10/07/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER NIESZ, JASON KAROL				
ART UNIT 3751		PAPER NUMBER		
NOTIFICATION DATE 10/07/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/572,356

**Applicant(s)**

STADLMAYR ET AL.

**Examiner**

JASON K. NIESZ

**Art Unit**

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16, 19-27 and 29-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16, 19-27 and 29-40 is/are rejected.
- 7) ☐ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitations "the liquid," "the gas enriched liquid," and "the liquid gas." There is insufficient antecedent basis for these limitations in the claim.

Furthermore, it is not clear what is meant by the limitation "the liquid gas."

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16, 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meheen (US Patent 6,457,495) in view of Dekleva (US PGPub 2003/0232114).

In Re claim 16 with reference to figure 5B Meheen discloses a method for the preparation and bottling of beverages comprising filling a container with a gas enriched liquid (S60) (Column 14, lines 33-35) and sealing the containers (Column 14, lines 58-60). Meheen also discloses pressurizing the liquid with a nitrogen atmosphere while filling (Column 13, lines 40-53).

Meheen doesn't disclose enriching a liquid with oxygen. The examiner notes that the Meheen method is directed to the bottling of beverages.

Dekleva discloses enriching liquid with oxygen to provide an oxygen enriched beverage (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Meheen method by using the Meheen filling method to bottle an oxygen enriched beverage, In order to provide a customer with said oxygen enriched beverage.

In Re claim 19 Meheen in view of Dekleva as applied to claim 16 above discloses the claimed invention except for the pressure range of the nitrogen atmosphere used in the counter pressure operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to pressurize the nitrogen atmosphere in the range of 1-10 bar, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In Re claim 29 with reference to Figure 5 Meheen discloses a bottle (GB).

3. Claims 16, 19-24, 29-34 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clusserath et al. (US Patent 6,474,368) in view of Tsukano et al. (US Patent 6,308,752) and in further view of Dekleva.

In Re claim 16 Clusserath discloses a method for the preparation and bottling of liquids comprising the steps of filling a container with a gas enriched liquid (Figure 7, 207) (Column 10, line 15), sealing the container (Figure 8, 223) and keeping the

enriched liquid under an inert atmosphere during the bottling process (Column 5, lines 47-67 and Column 6, lines 1-28) (Column 3, lines 43-59).

Clusserath doesn't disclose enriching the liquid with oxygen, or the use of a nitrogen atmosphere.

Tsukano discloses a beverage filling machine similar to Clusserath which uses nitrogen as an inert pressurizing gas (Column 3, lines 56-58).

Dekleva discloses enriching liquid with oxygen to provide an oxygen enriched beverage (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Clusserath method by using nitrogen as the inert gas, since the use of nitrogen gas for the more general "inert" gas specified in the Clusserath method requires only routine skill in the art. Furthermore, it would have been obvious to use to the Clusserath method to bottle a beverage enriched with oxygen, as shown in Dekleva, in order to provide a customer with said oxygen enriched beverage.

In Re claim 19 Clusserath in view of Tsukano and Dekleva as applied to claim 16 above discloses the claimed invention except for the pressure range of the nitrogen atmosphere used in the counter pressure operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to pressurize the nitrogen atmosphere in the range of 1-10 bar, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In Re claim 20 with reference to Figure 7 Clusserath discloses the steps of pre-pressurizing the container with the inert gas (206). As can be seen from Figure 4 the pre-pressurizing gas source (18) is the same as the liquid pressurizing gas (14). This indicates that the pre-pressurizing occurs at the same pressure as the container filling.

In Re claim 21 with reference to Figure 7 Clusserath discloses flushing the container with inert gas prior to filling (202, 204).

In Re claim 22 with reference to Figure 7 Clusserath discloses evacuating the container (205) prior to the pre-pressurization step.

In Re claim 23 with reference to Figure 7 Clusserath discloses pressurizing the container (206) after flushing the container (202, 204).

In Re claim 24 Clusserath in view of Tsukano discloses all the limitations, but doesn't disclose the reuse of the pressurizing gas. However, it was commonly known in the art at the time of the invention to reclaim gas used in pressurizing operations as a way to preserve potentially expensive pressurized gas. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Clusserath method by reclaiming the inert gas from the pre-pressurizing step and using it to flush subsequent containers, in order to prevent gas from being wasted.

In Re claim 29 with reference to Figure 3, Clusserath discloses a bottle (2).

In Re claim 30 with reference to Figure 3 Clusserath discloses an apparatus for the preparation and bottling of liquids comprising: a filling element (22) having a liquid valve (11), and a gas valve (24) connected to a gas filled chamber (14) by way of a flow

connection (18). Clusserath further discloses a vat (12) partially filled with a liquid and pressurized with an inert gas (14).

Clusserath doesn't disclose an oxygen enriched liquid or the use of nitrogen as a pressurizing gas.

Tsukano discloses a beverage filling machine similar to Clusserath which uses nitrogen as an inert pressurizing gas (Column 3, lines 56-58).

Dekleva discloses enriching liquid with oxygen to provide an oxygen enriched beverage (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Clusserath apparatus by using nitrogen as the inert gas, since the use of nitrogen for the more general "inert" gas of the Clusserath apparatus would require only routine skill in the art. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to try using the Clusserath apparatus to dispense oxygen enriched beverages, such as the one disclosed in Dekleva, in order to provide a customer with said oxygen enriched beverage.

In Re claim 31 with reference to Figure 4 Clusserath discloses a flush gas channel (18) and a pressurization valve (24).

In Re claim 32 with reference to Figure 4 Clusserath discloses a vacuum channel (21) and a relief valve (24).

In Re claim 33 with reference to Figure 4 Clusserath discloses a gas enriched liquid (15) entering a partially filled tank (12) which can be pressurized with nitrogen.

In Re claim 34 Clusserath in view of Tsukano and Dekleva as applied to claim 33 above discloses the claimed invention except for the pressure range of the nitrogen atmosphere used to pressurize the vat. It would have been obvious to one having ordinary skill in the art at the time the invention was made to pressurize said nitrogen atmosphere in the range of 1-10 bar, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*. 105 USPQ 233.

In Re claim 38 Clusserath discloses a liquid enriched with carbon dioxide (Column 10, line 15). The examiner notes that the combined Clusserath in view of Tsukano and Dekleva apparatus applied to claim 30 above comprises a beverage enriched with oxygen.

In Re claim 39 the examiner notes that a gas enriched liquid inherently contains a dissolved gas.

In Re claim 40 with reference to Figure 3, Clusserath discloses a bottle.

4. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meheen in view Dekleva in further view of Quinn (US Patent 5,131,440).

In Re claim 25 Meheen in view of Dekleva as applied to claim 16 above discloses all the limitations, but doesn't disclose the step of introducing a liquid gas into the container prior to filling the container.

Quinn discloses a dispensing system which can be used to apply a liquid gas dose to a container prior to filling (Column 7, lines 55-62).



Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Meheen method by including the step from Quinn of introducing a liquid gas, prior to placing the bottle on the Meheen filling apparatus, in order to help exclude atmospheric contaminants from the filling process.

In Re claim 26 Quinn discloses nitrogen (abstract).

In Re claim 27 the combined Meheen in view of Quinn apparatus applied to claim 25 above introduces the liquid gas prior to the Meheen filling method which contains the evacuation step.

5. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clusserath in view of Tsukano and Dekleva and in further view of Bethurum (4,120,425).

In Re claims 35 and 36 Clusserath in view of Tsukano and Dekleva as applied to claim 33 above discloses the limitations, but doesn't disclose separating the liquid in the vat from the pressurizing gas.

In Figure 1 Bethurum discloses a liquid dispenser (13) comprising a beverage (2) separated from a pressure exerting gas (3) by a membrane (4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Clusserath apparatus by adding a membrane separating the liquid in the vat from the pressure exerting gas, as taught by Bethurum, in order to prevent the gas from potentially contaminating the liquid.

6. Claim 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Clusserath in view of Tsukano and Dekleva and in further view of Quinn.

In Re claim 37 Clusserath in view of Tsukano and Dekleva as applied to claim 30 above discloses all the limitations, but doesn't disclose an apparatus for introducing a liquid gas into an open container.

With reference to Figure 1 Quinn discloses an apparatus (2) for introducing a liquid gas into an open container prior to filling (Column 7, lines 55-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Clusserath apparatus by adding the Quinn device for introducing a liquid gas, in order to help exclude atmospheric contaminants from the filling process.

***Allowable Subject Matter***

7. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments, see Arguments, filed 07/17/2009, with respect to Claim 23 have been fully considered and are persuasive. The rejection of claim 12 under 35 U.S.C. 112, Second Paragraph has been withdrawn.

9. Applicant's arguments, see Arguments, filed 07/17/2009, with respect to Claims 16, 18 and 29 regarding the Bedin reference have been fully considered and are persuasive. The rejection of claims 16, 18 and 29 under over Bedin has been withdrawn.

10. Applicant's arguments filed 07/17/2009 with respect to the Meheen, Clusserath and Dekleva references have been fully considered but they are not persuasive. New amended claims 16 and 30 not specify that the liquid being bottled by the method or apparatus is enriched with oxygen. Applicant argues that this overcomes the rejection of said claims based on either Meheen or Clusserath because both Meheen and Clusserath are directed to the bottling of beverages containing other gases, (primarily carbon dioxide). Applicant further points out that both Meheen and Clusserath disclose the desirability of limiting the contact that said beverages have with atmospheric oxygen in order to prevent degradation of said beverages. However, Dekleva discloses a process for enriching a liquid with oxygen in order to produce an oxygen enriched beverage (abstract). Meheen and Clusserath both describe a method and apparatus for bottling a beverage while limiting its exposure to the atmosphere. Both Meheen and Clusserath could be advantageously used to bottle the oxygen enriched liquid of Dekleva without exposing it to atmospheric contamination, a fact which would be apparent to one of ordinary skill in the art. Furthermore, the use of either the Meheen or the Clusserath method or apparatus to bottle the Dekleva beverage is obviously not subject to the same concerns about oxygen contact as the original Meheen or Clusserath beverages.

Specifically regarding the Dekleva reference applicant argues on Page 21 at lines 7-9 that Dekleva fails to disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture. This is incorrect: Dekleva clearly describes enriching a liquid with oxygen in the abstract as well as in paragraphs 82 and 83.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON K. NIESZ whose telephone number is (571)270-3920. The examiner can normally be reached on mon-fri 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason K Niesz  
Examiner  
Art Unit 3751

/Gregory L. Huson/  
Supervisory Patent Examiner, Art Unit 3751